

NOTE

THE DELETION OF *CYPERUS HERMAPHRODITUS*  
(CYPERACEAE: *TETRAGONI*) FROM THE  
LOUISIANA FLORA

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Fieldwork in Louisiana produced collections of *Cyperus thyrsiflorus* Jungh. (Rosen 789, 1084, NO). We reviewed Thomas and Allen (1993) for information on the distribution of *C. thyrsiflorus* in Louisiana and found this species synonymized under *C. hermaphroditus* (Jacq.) Standl., a putative, yet largely allopatric Neotropical ally of the poorly circumscribed Section *Tetragoni* (Carter and Jones 1997). This classification problem also occurs in the *Manual of the Vascular Plants of Texas* (Correll and Johnston 1970), erroneously extending the range of *C. hermaphroditus* into the southeastern United States. In his revision of the Mexican species of *Cyperus*, Tucker (1994) also included Texas in the distribution of *C. hermaphroditus*. Preparation of the *Vascular Plants of Texas* by Jones et al. (1997) brought to light that the name *C. hermaphroditus* had been misapplied to specimens of *C. thyrsiflorus*, thus necessitating the deletion of *C. hermaphroditus* from the Texas flora. In Horvat's (1941) revision of the subgenus *Mariscus*, she reported a collection of *C. hermaphroditus* from Arizona, and an evident "fugitive" from Alabama, apparently the only collections for North America. The remaining collections are from Central America, South America, and Mexico. We have examined specimens identified as *C. hermaphroditus* from Louisiana (NLU, NO) and found them to be *C. thyrsiflorus* and *C. pilosus* Vahl. We, herewith, wish to continue the clarification of the taxonomic confusion associated with these two species in the southeastern United States by proposing the deletion of *C. hermaphroditus* from the Louisiana flora.

The following key separates *Cyperus thyrsiflorus* from *C. hermaphroditus* and *C. pilosus*. Though *C. hermaphroditus* does not occur in Louisiana, it is included for comparison. *Cyperus pilosus* apparently has often been mistaken for *C. thyrsiflorus* in Louisiana, and therefore is included in the key. Pertinent synonymy following Jones et al. (1997), a brief description modified from Tucker (1994) and Carter and Jones (1997), and an illustration of *C. thyrsiflorus* are also provided.

## KEY

1. Rachis glabrous ..... (2)
  2. Spikelets remote, 7–9 per 5 mm rachis span in proximal half of rachis; achenes narrowly elliptic to oblong, 0.5–0.65 mm wide ..... *C. thyrsiflorus*
  2. Spikelets more congested, 18–26 per 5 mm rachis span in distal half of rachis; achenes elliptic to oblong to narrowly obovate, 0.6–0.8 mm wide ..... *C. hermaphroditus*
1. Rachis antrorsely strigose ..... *C. pilosus*

*Cyperus thyrsiflorus* Jungh. Linnaea 6: 24. 1831. Figure 1.

[= *C. anceps* Liebm., *C. dissitiflorus* C. Nees ex Torr., *C. pallens* (Liebm.) Standl. & Steyerl., *C. regiomontanus* var. *pallens* (Liebm.) Kük., *C. tribrachiatus* (Liebm.) Kük., *Mariscus dissitiflorus* (C. Nees ex Torr.) C. B. Clarke, *M. pallens* Liebm., *M. tribrachiatus* Liebm.]

Rhizomatous perennial, 20–40 cm tall. Mid-culm diameter 0.5–1.5 mm, trigonous, smooth. Leaves 0.8–2.8 (–3.0) mm wide. Inflorescence rays (2–) 3–6; peduncles conspicuous; inflorescence bracts 5–7. Spikes oblong to subglobose; spikelet length 3.4–7.4 (–17.0) mm, mostly divaricate; scale length 2.0–3.0 mm long, veins and margin whitish. Stigmas 3, stamens 3, mature achenes 1.8–2.1 mm long, 0.4–0.45 mm wide, trigonous, brown. Infrequent in dry-mesic woods, more common in waste places and disturbed areas from Florida west to Texas, the Caribbean, Mexico, and South America.

SPECIMENS EXAMINED: Louisiana: Ascension Parish, 18 May 1999, *Rosen* 789 (NO); Avoyelles, 11 Oct 1985, *Thomas et al.* 94088 (NLU); Cameron Parish, 6 Sep 1984, *Thomas et al.* 90803 (NLU); East Baton Rouge Parish, 17 Jul 1934, *Chilton & Trotter* 104 (NLU); Iberia Parish, 22 Jun 1983, *Thomas & McCoy* 84393 (NLU); Jefferson Parish, 11 Sep 1980, *Darwin* 1922 (NLU);



Figure 1. *Cyperus thyrsoiflorus*. A. spikelet showing overlapping fertile scales (bar = 1 mm); B. habit (bar = 1 cm); C. spike showing oblong shape and remote, mostly divaricate spikelets (bar = 1 mm). Drawn from *Rosen* 789.

Orleans Parish, 28 Jul 1974, *Thomas et al.* 40637 (NLU); Plaquemines Parish, 4 Sep 1978, *Fleming* 395 (NO); St. Bernard Parish, 17 Jun 1960, *Lemaire* 628 (NO); St. Tammany Parish, 28 Apr 2000, *Rosen* 1084 (NO); Terrebonne Parish, 16 Jun 1991, *Thomas et al.* 123938 (NLU); Vermilion Parish, 11 Jul 1989, *Slaughter* 997 (NLU); West Feliciana Parish, 14 Aug 1972, *Curry et al.* 469 (NLU).

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#### LITERATURE CITED

- CARTER, R. AND S. D. JONES. 1997. Notes on the *Cyperus retroflexus* complex (Cyperaceae) with three nomenclatural proposals. *Rhodora* 99: 319–334.
- CORRELL, D. S. AND M. C. JOHNSTON. 1970. *Manual of the Vascular Plants of Texas*. Texas Research Foundation, Renner, TX.
- HORVAT, M. I. 1941. A revision of the subgenus *Mariscus* found in the United States. *Catholic Univ. Amer., Biol. Ser.* 33: 1–147.
- JONES, S. D., J. K. WIPFF, AND P. M. MONTGOMERY. 1997. *Vascular Plants of Texas: A Comprehensive Checklist including Synonymy, Bibliography, and Index*. Univ. Texas Press, Austin, TX.
- THOMAS, R. D. AND C. M. ALLEN. 1993. *Atlas of the Vascular Flora of Louisiana, Vol. 1: Fern Allies, Conifers, and Monocotyledons*. The Natural Heritage Program, Wildlife Div., Louisiana Dept. Wildlife and Fisheries, Baton Rouge, LA.
- TUCKER, G. C. 1994. Revision of the Mexican species of *Cyperus* (Cyperaceae). *Syst. Bot. Monogr.* 43: 1–213.